## EP 0 358 234 B1

|      | EXAMPLE 13 (cont'd)               | Amount per 1 ml     |
|------|-----------------------------------|---------------------|
|      | Disodium EDTA, USP                | 1.00 mg             |
| 5    | Citric acid monohydrate, USP      | 12.19 mg            |
|      | Sodium citrate dihydrate,<br>USP  | 12.37 mg            |
| 10   | Hydrochloric acid, ACS  If needed | To adjust pH to 4.0 |
|      | Sodium hydroxide, ACS             | To adjust pH to 4.0 |
| 15   | Water for injection, USP          | q.s. to 1 ml        |
|      | EXAMPLE 14                        | Amount per 1 ml     |
| 20   | Calcitonin <sup>8</sup>           | 1428.0 I.U.         |
|      | $\Delta$ -aminolevulinic acid     | 5.0 mg              |
|      | Benzalkonium chloride             | -                   |
|      | solution, N.F., 50%               | 0.20 mg             |
| 25   | Disodium EDTA, USP                | 1.00 mg             |
|      | Citric acid monohydrate, USP      | 12.19 mg            |
|      | Sodium citrate dihydrate, USP     | 12.37 mg            |
| 30   | Hydrochloric acid, ACS            | To adjust pH to 4.0 |
|      | If needed                         |                     |
|      | Sodium hydroxide ACS              | To adjust pH to 4.0 |
| ar · | Water for injection, USP          | q.s. to 1 ml        |
| 35   | •                                 |                     |

The gelatin used in the above formulations is a standard hydrolipid animal gelatin prepared for pharmaceutical use and routinely used as a diluent for peptides.

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Synthetic salmon calcitonin having a potency of 4,000 MRC (Medical Research Council units.

## EP 0 327 756 B1

## Examples 17, 18 and 19.

The following compositions were prepared according to the method described in Examples 1 to 9.

Table 7

| -                                     | Example No.  |           |      |  |
|---------------------------------------|--------------|-----------|------|--|
|                                       | 17           | 18        | 19   |  |
| Elcatonin (µg) (6500 I.U./mg potency) | 7380         | 3690      | 3690 |  |
| Ammonium Glycyrrhizinate (g)          | 0.5          | 0.5       | )    |  |
| Citric Acid (mg)                      | 37           | . 37      | 37   |  |
| Sodium citrate dihydrate (mg)         | 463          | 463       | 463  |  |
| Methyl p-hydroxybenzoate (mg)         | 130          | 130       | 130  |  |
| Propyl p-hydroxybenzoate (mg)         | 20           | 20        | 20   |  |
| Distilled water                       | q.s. to      | to 100 ml |      |  |
| 1N NaOH                               | q.s. to pH 6 |           |      |  |

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## Examples 20-25

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Table 8

|   | Example No.    |      |       |      |      |      |  |
|---|----------------|------|-------|------|------|------|--|
|   | 20             | 21   | 22    | 23   | 24   | 25   |  |
| Elcatonin (µg) (6500 I.U./mg potency)                       | 7380           | 3690 | 7380  | 3690 | 7380 | 3690 |  |
| Ammonium glycyrrhizinate (g)                                | 0.5            | 0.5  | 1 .   | 1    | 2    | 2    |  |
| Citric acid (mg)  | 37             | 37   | 37    | 37   | 37   | 37   |  |
| Sodium citrate  | 463            | 463  | 463   | 463  | 463  | 463  |  |
| dihydrate (mg)  |                |      | Ì     |      |      | •    |  |
| Methyl p-hydroxybenzoate (mg) Propyl p-hydroxybenzoate (mg) | 130            | 130  | 130 - | 130  | 130  | 130  |  |
|   | 20             | 20   | 20    | 20   | 20   | 20   |  |
| Sodium chloride (mg)  | 600            | 600  | 600   | 600  | 600  | 600  |  |
| Polysorbate 80 (mg)   | 5              | 5    | 5     | 5    | 5    | 5    |  |
| Distilled water   | q.s. to 100 ml |      |       |      |      |      |  |
| 1N NaOH   | q.s. to pH 6   |      |       |      |      |      |  |

The formulations of Examples 20 to 25 were prepared by mixing together the ammonium glycyrrhizinate, citric acid, sodium citrate dihydrate, methyl p-hydroxybenzoate, propyl p-hydroxybenzoate, sodium chloride, polysorbate 80, distilled water and sodium hydroxide in a water bath regulated at a temperature of about 60 °C. The resulting solution was allowed to cool to room temperature and the elcatonin was then added.

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